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ABSTRACT OF THE INVENTION

A wireless receiving apparatus and method, which utilizes a single MCU (microprocessor control unit) in the wireless to receive and process signals having different frequencies transmitted from a plurality of peripheral devices simultaneously, and then proceed the steps of reading a predetermined processing procedure from a memory with respect to each of the signals respectively, performing a predetermined process with respect to each of the signals, storing index of the last finished step for each signal in the memory respectively after at least a set of steps of the predetermined processing procedure has been performed, and continuing to perform the steps following the indices of the previous set of steps stored in the memory for carrying out a next set of steps for each signal, and repeating a plurality of sets of steps until all received signals have been processed.